August 31, 2016 Service Request No:R1608289

Ms. Ancy Sebastian
ALS Environmental - Canada
5420 Mainway Drive, Unit #5
Burlington, ON L7L 6A4

Laboratory Results for: Picatinny Arsenal

Dear Ms.Sebastian,

Enclosed are the results of the sample(s) submitted to our laboratory August 04, 2016
For your reference, these analyses have been assigned our service request number **R1608289.**

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

Please contact me if you have any questions. My extension is 7472. You may also contact me via email at Janice.Jaeger@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Janice Jaeger
Project Manager

ADDRESS 1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
PHONE +1 585 288 5380 | FAX +1 585 288 8475
ALS Group USA, Corp.
dba ALS Environmental

Client: ALS Environmental - Canada
Project: Picatinny Arsenal
Sample Matrix: Soil

Service Request:R1608289
Date Received:8/4/16

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV, validation deliverables including all summary forms and associated raw data. Analytical procedures performed by the lab are validated in accordance with NELAC standards. Any parameters that are not included in the lab's NELAC accreditation are identified on a "Non-Certified Analytes" report in the Miscellaneous Forms Section of this report. Individual analytical results requiring further explanation are flagged with qualifiers and/or discussed below. The flags are explained in the Report Qualifiers and Definitions page in the Miscellaneous Forms section of this report.

Sample Receipt

4 / Soil samples were received for analysis at ALS Environmental on 08/04/2016. Any discrepancies noted upon initial sample inspection are noted on the cooler receipt and preservation form included in this data package. The samples were received in good condition and consistent with the accompanying chain of custody form. Samples are refrigerated at ≤6°C upon receipt at the lab except for aqueous samples designated for metals analyses, which are stored at room temperature.

Volatile Organic Analyses:

Method 8260c, 8/9/16, R1608289-004: The recovery of one or more internal standards was outside control limits because of suspected matrix interference. The sample was re-extracted and reanalyzed, but produced similar results. No further corrective action was appropriate.

Method 8260c, R1608289-004: The control limits were exceeded for one or more surrogates due to matrix interferences. A re-extraction and reanalysis was performed, but produced similar results. No further corrective action was required.

Semi-Volatile Organic Analyses:

Method 8270D, R1608289-003: The control limits were exceeded for one or more surrogates in the sample(s). Since the problem may indicate a potential bias in the analytical batch, all associated field samples were re-extracted out of holding time and reanalyzed. The surrogates met control limits for the reanalysis. Since the re-extraction was done out of holding time both results were reported and flagged.

Sample Receiving Notes:

Method 8260C: soil samples included in this report were received in jars and not collected using one of the EPA method 5035A low level options. In accordance with the NYSDOH technical notice of October 2012 all results or reporting limits <200 ug/kg should be considered as estimated due to potential low bias.

Approved by _____ Date 8/31/2016

SAMPLE DETECTION SUMMARY

CLIENT ID: PY-1006 Baghouse	Lab ID: R1608289-003					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Total Solids	54.6				Percent	ALS SOP

CLIENT ID: PY-3006C Quench Ash	Lab ID: R1608289-004					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Total Solids	98.8				Percent	ALS SOP

Sample Receipt Information

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: ALS Environmental - Canada **Service Request:**R1608289
Project: Picatinny Arsenal

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
R1608289-001	PY-1005 Baghouse Ash	8/2/2016	1520
R1608289-002	PY-3005C Quench Ash	8/2/2016	1545
R1608289-003	PY-1006 Baghouse	8/2/2016	1520
R1608289-004	PY-3006C Quench Ash	8/2/2016	1545

ANALYSIS REQUEST AND CHAIN-OF-CUSTODY RECORD

REFERENCE COC NO.: T1-002-NY-Ash

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Bill To: CBI Federal Services
Accounts Payable

Project Name/No: Picatinny Arsenal
Sample Team Member: J. McGee, G. Britt, D. Jarvis, G. Ward
Project Manager: Berani Halley
Purchase Order No.:
Required Report Date: **Normal**

Sample Shipment Date: **8/03/2016**
Laboratory Destination: ALS-NY
Laboratory Contact: Ancy Sebastian
Project Contact/Phone: Joyce McGee 865-850-7306
Carrier Waybill No.: **Lab Courier**

Report To: CBI Federal Services
Joyce McGee
2410 Cherahala Drive
Knoxville, TN 37932

Sample Number	Analytical QC	Sample Type/ Description	Date/Time Collected	Container Type	Pre-servative	Requested Testing Program	Sample Notes / Expectations	Disposal Record
PY-1005		Baghouse Ash	8/02/2016 1520	500-mL AmberGlass	Cool, 4C	Semivolatiles (1,2-DCB)		
PY-3005C		Quench Ash	8/02/2016 1545	250-mL AmberGlass	Cool, 4C	Volatiles (TCE + Benzene)		
PY-1006		Baghouse Ash	8/02/2016 1520	500-mL AmberGlass	Cool, 4C	Semivolatiles (1,2-DCB)		
PY-3006C		Quench Ash	8/02/2016 1545	250-mL AmberGlass	Cool, 4C	Volatiles (TCE + Benzene)		

Special Instructions: These sample are part of Test Condition #1. Please log and report as a separate lab SDG and not as a part of other samples received 8/3/2016. These samples correspond to testing conducted 7/27-7/29-16

Possible Hazard Identification:
Non-haz: ___ Flammable: ___ Poison B: ___ Unknown: X

Sample Disposal:
Return to Client: ___ Disposal by Lab: X Archive: ___

Turnaround Time:
Normal: X Rush: ___

Level of QC Required:
I. ___ II. ___ III. ___ Project Specific: X (talk to A. Sebastian)

1. Relinquished by: J. McGee, CB&I Federal Servcies Date: 8/3/16 Time: 1900
1. Received by: Greg Bondell Date: 03/Aug/16 Time: 19:00
2. Relinquished by: Date: Time:
2. Received by: Date: 8/4/16 Time: 16:30

Comments: **If samples not received in good condition contact Joyce McGee (865)-850-7306 immediately.**

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ALS Environmental - Canada
Picatinny Arsenal

R1608289 5

ALS Environmental - Canada
Picatinny Arsenal

Cooler Receipt and Preservation Check Form

Project/Client ALS Folder Number _____.

Cooler received on 5/4/16 by: TS

COURIER: ALS UPS FEDEX VELOCITY (CLIENT)

1	Were **Custody seals** on outside of cooler?	Y (N)
2	**Custody papers** properly completed (ink, signed)?	(Y) N
3	Did all bottles arrive in good **condition** (unbroken)?	(Y) N
4	Circle: (**Wet Ice**) **Dry Ice** **Gel packs** present?	(Y) N

5a	**Perchlorate** samples have required headspace?	Y N (NA)
5b	Did VOA vials, Alk,or Sulfide have sig* **bubbles**?	Y N (NA)
6	Where did the bottles originate? ALS/ROC (CLIENT)	
7	Soil VOA received as: Bulk Encore 5035set (NA)	

8. Temperature Readings Date: 5/4/16 Time: 1445 ID: (IR#5) IR#6 From: Temp Blank (Sample Bottle)

Observed Temp (°C)	5.3	2.5	4.9	3.9			
Correction Factor (°C)	-.5	0	0	0			
Corrected Temp (°C)	7.8	2.5	4.9	3.9			
Within 0-6°C?	Y (N)	(Y) N	(Y) N	(Y) N	Y N	Y N	Y N
If <0°C, were samples frozen?	Y N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted (Poorly Packed) Same Day Rule

&Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: Rm 2 by TS on 5/4/16 at 1445
5035 samples placed in storage location: _____ by _____ on _____ at _____

Cooler Breakdown: Date: 5/8/16 Time: 1210 by: TS

1. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? (YES) NO
2. Did all bottle labels and tags agree with custody papers? (YES) NO
3. Were correct containers used for the tests indicated? (YES) NO
4. Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated (N/A)

Explain any discrepancies:

pH	Reagent	Yes	No	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO_3								
≤2	H_2SO_4								
<4	$NaHSO_4$								
Residual Chlorine (-)	For CN Phenol and 522			If +, contact PM to add $Na_2S_2O_3$ (CN), ascorbic (phenol).					
	$Na_2S_2O_3$	-	-						
	ZnAcetate	-	-						
	HCl	**	**						

**Not to be tested before analysis – pH tested and recorded by VOAs on a separate worksheet

Yes=All samples OK

No=Samples were preserved at The lab as listed

PM OK to Adjust: _____

Bottle lot numbers: Client bottle

Other Comments:

CLRES	(BULK)
DO	FLDT
HPROD	HGFB
HTR	LL3541
PH	SUB
SO3	MARRS
ALS	REV

PC Secondary Review: MM 8/9/16

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

Miscellaneous Forms

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REPORT QUALIFIERS AND DEFINITIONS

U	Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.
J	Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).
B	Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.
E	Inorganics- Concentration is estimated due to the serial dilution was outside control limits.
E	Organics- Concentration has exceeded the calibration range for that specific analysis.
D	Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.
*	Indicates that a quality control parameter has exceeded laboratory limits. Under the ñNotesò column of the Form I, this qualifier denotes analysis was performed out of Holding Time.
H	Analysis was performed out of hold time for tests that have an ñimmediateò hold time criteria.
#	Spike was diluted out.
+	Correlation coefficient for MSA is <0.995.
N	Inorganics- Matrix spike recovery was outside laboratory limits.
N	Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
S	Concentration has been determined using Method of Standard Additions (MSA).
W	Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
P	Concentration >40% (25% for CLP) difference between the two GC columns.
C	Confirmed by GC/MS
Q	DoD reports: indicates a pesticide/Aroclor is not confirmed (Ó100% Difference between two GC columns).
X	See Case Narrative for discussion.
MRL LOQ	Method Reporting Limit. Also known as: Limit of Quantitation (LOQ) The lowest concentration at which the method analyte may be reliably quantified under the method conditions.
MDL	Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).
LOD	Limit of Detection. A value at or above the MDL which has been verified to be detectable.
ND	Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

Rochester Lab ID # for State Certifications[1]

Connecticut ID # PH0556	Maine ID #NY0032	New Hampshire ID # 294100 A/B
Delaware Accredited	Nebraska Accredited	
DoD ELAP #65817	New Jersey ID # NY004	Pennsylvania ID# 68-786
Florida ID # E87674	New York ID # 10145	Rhode Island ID # 158
Illinois ID #200047	North Carolina #676	Virginia #460167

[1] Analyses were performed according to our laboratoryôs NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the case narrative. Since not all analyte/method/matrix combinations are offered for state/NELAC accreditation, this report may contain results which are not accredited. For a specific list of accredited analytes, contact the laboratory or go to http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads/North-America-Downloads

ALS Laboratory Group

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client:	ALS Environmental - Canada	**Service Request:**	R1608289
Project:	Picatinny Arsenal		

Sample Name:	PY-1005 Baghouse Ash	**Date Collected:**	08/2/16
Lab Code:	R1608289-001	**Date Received:**	08/4/16
Sample Matrix:	Soil		

Analysis Method	Extracted/Digested By	Analyzed By
8270D	MROGERSON	JMISIUREWICZ

Sample Name:	PY-3005C Quench Ash	**Date Collected:**	08/2/16
Lab Code:	R1608289-002	**Date Received:**	08/4/16
Sample Matrix:	Soil		

Analysis Method	Extracted/Digested By	Analyzed By
8260C		FNAEGLER

Sample Name:	PY-1006 Baghouse	**Date Collected:**	08/2/16
Lab Code:	R1608289-003	**Date Received:**	08/4/16
Sample Matrix:	Soil		

Analysis Method	Extracted/Digested By	Analyzed By
8270D	MROGERSON	JMISIUREWICZ
ALS SOP		MLAMBRECHT

Sample Name:	PY-3006C Quench Ash	**Date Collected:**	08/2/16
Lab Code:	R1608289-004	**Date Received:**	08/4/16
Sample Matrix:	Soil		

Analysis Method	Extracted/Digested By	Analyzed By
8260C		FNAEGLER
ALS SOP		MLAMBRECHT

The preparation methods associated with this report are found in these tables unless discussed in the case narrative.

Water/Liquid Matrix

Analytical Method	Preparation Method
200.7	200.2
200.8	200.2
6010C	3005A/3010A
6020A	ILM05.3
9014 Cyanide Reactivity	SW846 Ch7, 7.3.4.2
9034 Sulfide Reactivity	SW846 Ch7, 7.3.4.2
9034 Sulfide Acid Soluble	9030B
9056A Bomb (Halogens)	5050A
9066 Manual Distillation	9065
SM 4500-CN-E Residual Cyanide	SM 4500-CN-G
SM 4500-CN-E WAD Cyanide	SM 4500-CN-I

Solid/Soil/Non-Aqueous Matrix

Analytical Method	Preparation Method
6010C	3050B
6020A	3050B
6010C TCLP (1311) extract	3005A/3010A
6010 SPLP (1312) extract	3005A/3010A
7196A	3060A
7199	3060A
9056A Halogens/Halides	5050
300.0 Anions/ 350.1/ 353.2/ SM 2320B/ SM 5210B/ 9056A Anions	DI extraction

For analytical methods not listed, the preparation method is the same as the analytical method reference.

Sample Results

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client:	ALS Environmental - Canada	**Service Request:**	R1608289
Project:	Picatinny Arsenal	**Date Collected:**	08/02/16 15:45
Sample Matrix:	Soil	**Date Received:**	08/04/16 16:30
Sample Name:	PY-3005C Quench Ash	**Units:**	ug/Kg
Lab Code:	R1608289-002	**Basis:**	As Received

Volatile Organic Compounds by GC/MS, Unpreserved

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Benzene	5.0 U	5.0	1	08/09/16 14:17	
Trichloroethene (TCE)	5.0 U	5.0	1	08/09/16 14:17	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	105	51 - 136	08/09/16 14:17	
Dibromofluoromethane	107	63 - 138	08/09/16 14:17	
Toluene-d8	110	66 - 138	08/09/16 14:17	

Analytical Report

Client:	ALS Environmental - Canada	**Service Request:**	R1608289
Project:	Picatinny Arsenal	**Date Collected:**	08/02/16 15:45
Sample Matrix:	Soil	**Date Received:**	08/04/16 16:30
Sample Name:	PY-3006C Quench Ash	**Units:**	ug/Kg
Lab Code:	R1608289-004	**Basis:**	Dry

Volatile Organic Compounds by GC/MS, Unpreserved

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Benzene	13 U	13	2.5	08/09/16 14:41	
Trichloroethene (TCE)	13 U	13	2.5	08/09/16 14:41	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	45 *	51 - 136	08/09/16 14:41	*
Dibromofluoromethane	127	63 - 138	08/09/16 14:41	
Toluene-d8	100	66 - 138	08/09/16 14:41	

Client:	ALS Environmental - Canada	**Service Request:**	R1608289
Project:	Picatinny Arsenal	**Date Collected:**	08/02/16 15:45
Sample Matrix:	Soil	**Date Received:**	08/04/16 16:30
Sample Name:	PY-3006C Quench Ash	**Units:**	ug/Kg
Lab Code:	R1608289-004	**Basis:**	Dry

Volatile Organic Compounds by GC/MS, Unpreserved

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Benzene	13 U	13	2.5	08/09/16 17:31	
Trichloroethene (TCE)	13 U	13	2.5	08/09/16 17:31	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	38 *	51 - 136	08/09/16 17:31	*
Dibromofluoromethane	127	63 - 138	08/09/16 17:31	
Toluene-d8	100	66 - 138	08/09/16 17:31	

Client:	ALS Environmental - Canada	**Service Request:**	R1608289
Project:	Picatinny Arsenal	**Date Collected:**	08/02/16 15:20
Sample Matrix:	Soil	**Date Received:**	08/04/16 16:30
Sample Name:	PY-1005 Baghouse Ash	**Units:**	ug/Kg
Lab Code:	R1608289-001	**Basis:**	As Received

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2-Dichlorobenzene	990 U	990	110	1	08/11/16 16:42	8/10/16	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2-Fluorobiphenyl	49	10 - 102	08/11/16 16:42	
Nitrobenzene-d5	46	10 - 95	08/11/16 16:42	
p-Terphenyl-d14	83	16 - 126	08/11/16 16:42	

Analytical Report

Client:	ALS Environmental - Canada	**Service Request:**	R1608289
Project:	Picatinny Arsenal	**Date Collected:**	08/02/16 15:20
Sample Matrix:	Soil	**Date Received:**	08/04/16 16:30
Sample Name:	PY-1006 Baghouse	**Units:**	ug/Kg
Lab Code:	R1608289-003	**Basis:**	Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2-Dichlorobenzene	1800 U	1800	200	1	08/25/16 09:56	8/23/16	*

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2-Fluorobiphenyl	45	10 - 102	08/25/16 09:56	
Nitrobenzene-d5	44	10 - 95	08/25/16 09:56	
p-Terphenyl-d14	72	16 - 126	08/25/16 09:56	

Client:	ALS Environmental - Canada	**Service Request:**	R1608289
Project:	Picatinny Arsenal	**Date Collected:**	08/02/16 15:20
Sample Matrix:	Soil	**Date Received:**	08/04/16 16:30
Sample Name:	PY-1006 Baghouse	**Units:**	ug/Kg
Lab Code:	R1608289-003	**Basis:**	Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2-Dichlorobenzene	9100 U	9100	970	3	08/11/16 17:10	8/10/16	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2-Fluorobiphenyl	0 *	10 - 102	08/11/16 17:10	*
Nitrobenzene-d5	22	10 - 95	08/11/16 17:10	
p-Terphenyl-d14	307 *	16 - 126	08/11/16 17:10	*

Analytical Report

Client:	ALS Environmental - Canada	**Service Request:**	R1608289
Project:	Picatinny Arsenal	**Date Collected:**	08/02/16 15:20
Sample Matrix:	Soil	**Date Received:**	08/04/16 16:30
Sample Name:	PY-1006 Baghouse	**Basis:**	As Received
Lab Code:	R1608289-003		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Total Solids	ALS SOP	**54.6**	Percent	-	1	08/15/16 09:13	

Analytical Report

Client:	ALS Environmental - Canada	**Service Request:**	R1608289
Project:	Picatinny Arsenal	**Date Collected:**	08/02/16 15:45
Sample Matrix:	Soil	**Date Received:**	08/04/16 16:30
Sample Name:	PY-3006C Quench Ash	**Basis:**	As Received
Lab Code:	R1608289-004		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Total Solids	ALS SOP	**98.8**	Percent	-	1	08/15/16 09:13	

QC Summary Forms

ALS Environmental—Rochester Laboratory
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Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Analytical Report

Client:	ALS Environmental - Canada	**Service Request:**	R1608289
Project:	Picatinny Arsenal	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/Kg
Lab Code:	RQ1609318-01	**Basis:**	Dry

Volatile Organic Compounds by GC/MS, Unpreserved

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Benzene	5.0 U	5.0	1	08/09/16 11:40	
Trichloroethene (TCE)	5.0 U	5.0	1	08/09/16 11:40	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	104	51 - 136	08/09/16 11:40	
Dibromofluoromethane	106	63 - 138	08/09/16 11:40	
Toluene-d8	107	66 - 138	08/09/16 11:40	

Client: ALS Environmental - Canada
Project: Picatinny Arsenal
Sample Matrix: Soil

Service Request: R1608289
Date Analyzed: 08/09/16

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS, Unpreserved

Units:ug/Kg
Basis: Dry

Lab Control Sample
RQ1609318-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Benzene	8260C	19.8	20.0	99	40-140
Trichloroethene (TCE)	8260C	19.8	20.0	99	40-140

Analytical Report

Client:	ALS Environmental - Canada	**Service Request:**	R1608289
Project:	Picatinny Arsenal	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/Kg
Lab Code:	RQ1609360-01	**Basis:**	As Received

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2-Dichlorobenzene	330 U	330	36	1	08/11/16 09:32	8/10/16	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2-Fluorobiphenyl	44	10 - 102	08/11/16 09:32	
Nitrobenzene-d5	43	10 - 95	08/11/16 09:32	
p-Terphenyl-d14	72	16 - 126	08/11/16 09:32	

Analytical Report

Client:	ALS Environmental - Canada	**Service Request:**	R1608289
Project:	Picatinny Arsenal	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/Kg
Lab Code:	RQ1609974-01	**Basis:**	Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2-Dichlorobenzene	330 U	330	36	1	08/25/16 08:33	8/23/16	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2-Fluorobiphenyl	43	10 - 102	08/25/16 08:33	
Nitrobenzene-d5	37	10 - 95	08/25/16 08:33	
p-Terphenyl-d14	70	16 - 126	08/25/16 08:33	

Client: ALS Environmental - Canada
Project: Picatinny Arsenal
Sample Matrix: Soil

Service Request: R1608289
Date Analyzed: 08/11/16

Duplicate Lab Control Sample Summary
Semivolatile Organic Compounds by GC/MS

Units:ug/Kg
Basis: As Received

		Lab Control Sample			Duplicate Lab Control Sample					
		RQ1609360-02			RQ1609360-03					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,2-Dichlorobenzene	8270D	1270	3330	38	1100	3330	33	24-117	14	30

Client: ALS Environmental - Canada
Project: Picatinny Arsenal
Sample Matrix: Soil

Service Request: R1608289
Date Analyzed: 08/25/16

Duplicate Lab Control Sample Summary
Semivolatile Organic Compounds by GC/MS

Units:ug/Kg
Basis: Dry

			Lab Control Sample			Duplicate Lab Control Sample				
			RQ1609974-02			RQ1609974-03				
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,2-Dichlorobenzene	8270D	1570	3330	47	1340	3330	40	24-117	16	30